

## Appendix IV: Best Management Practices

### APPENDIX IV

#### GUIDANCE DOCUMENTS ON BEST MANAGEMENT PRACTICES

Document	Pollutant Source				Document Summary	Document Source
	A	L	U <sup>a</sup>	C		
Agricultural Best Management Practices Manual (1994)	✓				<b>Description:</b> Manual provides a step-by-step process for developing watershed management plans and individual water quality resource management plans. Discusses nonpoint sources and impacts. Integrates water quality concepts into the conservation planning process. <b>Intended audiences:</b> Local government; agricultural technical staff	Michigan Department of Natural Resources Publications P.O. Box 30273 Lansing, MI 48909 (517) 373-2867 (517) 373-9958 - fax Document is free
Agriculture and Water Quality	✓				<b>Description:</b> Describes and includes photos of 26 agricultural BMPs and their effects on water quality. <b>Intended audience:</b> Farmers	Barb Hennegan Minnesota Pollution Control Agency Public Information 520 Lafayette Road St. Paul, MN 55155 (612) 296-6619 (612) 297-8687 - fax Document is free
Farming Sand Soils: Strategies for Managing Nutrients and Pesticides in the Upper Midwest (1994)	✓				<b>Description:</b> Proceedings of conference held on March 1-2, 1994, in St. Cloud MN. Challenges for agricultural producers striving to balance agricultural productivity while minimizing the risk of groundwater contamination. Review of BMPs, latest research results implementation strategies, and discussion of how to accelerate adoption of practices. <b>Intended audiences:</b> Farmers, natural resource professionals, watershed coordinators	University of Minnesota Department of Soil science 439 Borlaug Hall 1991 Upper Buford Circle St. Paul, MN 55108 (612) 625-1244 (612) 625-2208 - fax Document costs \$5.00

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## GUIDANCE DOCUMENTS ON BEST MANAGEMENT PRACTICES (Continued)

Document	Pollutant Source				Document Summary	Document Source
	A	L	U <sup>a</sup>	C		
Best Management Practices for Agricultural Nonpoint Source Control: IV. Pesticides (1984)	✓				<b>Description:</b> Describes the factors and available research results relevant to selecting the most appropriate pesticide BMPs and BMP systems. <b>Intended audiences:</b> Farmers, government officials	Biological and Agricultural Engineering Department North Carolina State University EPA841-S-84-107
Best Management Practices for Wheat: A Guide to Profitable and Environmentally Sound Production (1994)	✓				<b>Description:</b> Covers best management practices for wheat farming across the U.S. <b>Intended audiences:</b> Farmers, local government, wheat growers	Evelyn Mitchell National Association of Wheat Growers 415 2nd Street NE, #300 Washington, D.C. 20002 (202) 547-7800 (202) 546-2638 - fax Document costs \$7.62
Water Standards, Fertilizer, and Pesticide Best Management Practices (1994)	✓		✓		<b>Description:</b> Two-page fact sheet <b>Intended audiences:</b> Farmers, and rural, suburban, and urban residents	Ron Carlstrom Montana Extension Water Quality 733 Leon Johnson Hall Montana State University Bozeman, MT 59717 Document is free
Wellhead Protection Best Management Practices, Fertilizer and Pesticide Best Management Practices (1994)	✓		✓		<b>Description:</b> Two-page fact sheet <b>Intended audiences:</b> Farmers, and rural, suburban, and urban residents	Ron Carlstrom Montana Extension Water Quality 733 Leon Johnson Hall Montana State University Bozeman, MT 59717 Document is free
Managing Crops and Animals Near Shorelands, Shoreland Best Management Practices	✓			✓	<b>Description:</b> BMPs for shoreland agricultural and grazing areas; one of 18 fact sheets <b>Intended audience:</b> Farmers, private landowners	Available at <a href="http://www.mes.umn.edu/Documents/D/D/Other/DD6946k.html">http://www.mes.umn.edu/Documents/D/D/Other/DD6946k.html</a>

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Document	Pollutant Source				Document Summary	Document Source
	A	L	U <sup>a</sup>	C		
BMPs for Water Quality (Comprehensive Version and Condensed Version)	✓				<b>Description:</b> Review and analysis of research and studies relating the important role of BMPs for reducing herbicide runoff. A tool for watershed groups addressing herbicide nonpoint source pollution. <b>Intended audiences:</b> Farmers, local government	Conservation Technology Information Center (CTIC) Publications 1220 Potter Drive, Suite 170 West Lafayette, IN 47906 (317) 494-9555 (317) 494-5969 - fax kyw@ctic.purdue.edu Document costs \$4.00 (comprehensive version) and \$2.50 (condensed version)
Strategy for Managing Nonpoint Source Pollution from Agricultural Sources and Best Management System Guidelines (1991)	✓				<b>Description:</b> This 68-page booklet outlines a strategy for dealing with nonpoint source pollution from agricultural sources. It includes agricultural BMPs and an implementation program, and outlines agency roles and responsibilities. <b>Intended audience:</b> Farmers; municipal and state officials	Arlene Davis Maine Department of Environmental Protection 17 State House Station Augusta, ME 04333-0017 Document is free
Pesticide Best Management Practices (1994)	✓		✓		<b>Description:</b> Two-page fact sheet <b>Intended audiences:</b> Farms and rural, suburban, and urban residents	Ron Carlstrom Montana State University Montana Extension Water Quality 733 Leon Johnson Hall Bozeman, MT 59717 (406) 994-6076 Document is free

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Document	Pollutant Source				Document Summary	Document Source
	A	L	U <sup>a</sup>	C		
Water Quality Indicators Guide: Surface Waters	✓				<b>Description:</b> Step-by-step process to identify problems and solutions. Discusses environmental indicators to evaluate water quality and the use of agricultural BMPs. <b>Intended audience:</b> None indicated	Order Department Terrene Institute P.O. Box 605 Herndon, VA 20172 (703) 661-1582 (703) 661-1501 - fax Web URL: <a href="http://www/terrene.org/catweb.htm">http://www/terrene.org/catweb.htm</a> Document costs...?
A Conservation Catalog	✓				<b>Description:</b> Review of BMPs for farmers. <b>Intended audience:</b> Farmers	Pennsylvania Chesapeake Bay Education Office Document is free
Nutrient Best Management Practices (1994)	✓		✓		<b>Description:</b> Two-page fact sheet <b>Intended audiences:</b> Farmers, and rural, suburban, and urban residents	Ron Carlstrom Montana Extension Water Quality 733 Leon Johnson Hall Montana State University Bozeman, MT 59717 Document is free
Kentucky Best Management Practices for Agriculture (1993)	✓				<b>Description:</b> Manual developed for agriculture land users and others to help them better understand the application and benefits of BMPs. Installation of BMPs reduce sediment, improve livestock waste management, and reduce nutrient and pesticide pollution to our water. <b>Intended audiences:</b> Farmers, local government	Steve Coleman Kentucky Division of Conservation 691 Teton Trail Frankfort, KY 40601 (502) 564-3080 Document is free
Best Management Practices for Maine Agricultural Producers	✓				<b>Description:</b> Manual contains sections on groundwater, pesticides, fertilizers, manure, and soils BMPs. <b>Intended audiences:</b> Farmers	John Jiemison University of Maine Cooperative Extension Libby Hall Orono, ME 04269 (207) 581-3241 Document is free

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Connecticut's Manual of Best Management Practices for Agriculture (1993)	✓				<b>Description:</b> Provides recommendations for BMPs related to agriculture. Gives overview of water quality problems and programs, and explains requirements of the Aquifer Protection Area Act for agriculture. <b>Intended audiences:</b> Farmers	CT Department of Environmental Protection Map and Publication Sales 79 Elm Street Hartford, CT 06106 (203) 566-7719 Document is free
New Hampshire's Manual of Best Management Practices for Agriculture (1993)	✓				<b>Description:</b> A booklet that provides guidance for implementing state law in regard to complaints concerning BMPs. <b>Intended audience:</b> None indicated	Richard Uncles NH Department of Agriculture Bureau of Markets P.O. Box 2042 Concord, NH 03302 Document is free
Storage Facilities Best Management Practices (1994)	✓		✓		<b>Description:</b> Two-page fact sheet <b>Intended audiences:</b> Farmers, and rural, suburban, and urban residents	Ron Carlstrom Montana Extension Water Quality 733 Leon Johnson Hall Montana State University Bozeman, MT 59717 Document is free
Trouble Brewing Behind the Silo: Silage Leachate and You (1992)	✓				<b>Description:</b> 10-page booklet explains the problems of silage leachate and describes BMPs for silage. <b>Intended audience:</b> Farmers	CT DEP Bureau of Water Management 79 Elm Street Hartford, CT 06106 (203) 566-7049 Document is free
What You Can Do About Nonpoint Source Pollution	✓		✓		<b>Description:</b> Fact sheet describes BMPs for reducing NPS. <b>Intended audience:</b> None indicated	URI Cooperative Extension Education Center University of Rhode Island Kingston, RI 02881 (800) 448-1011 Document is free

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Logging and Forestry BMPs for Water Quality in Indiana		✓			<b>Description:</b> Description of BMPs for timber harvesting. <b>Intended audience:</b> Timber industry, private woodlot owners	Indiana Department of Natural Resources Document is free
Water Resources and Timber Harvesting in the Lake States		✓		✓	<b>Description:</b> BMPs for shoreland woodlots <b>Intended audience:</b> Private landowners, foresters	Lake States Forestry Alliance E-1311 First National Bank Bldg. St. Paul, MN 55101
Protecting Water Quality and Wetlands in Forest Management -- Best Management Practices in Minnesota		✓		✓	<b>Description:</b> BMPs for shoreland woodlots <b>Intended audience:</b> Private landowners, foresters	MN Department of Natural Resources Forestry Division and MN Pollution Control Agency
Managing Your Shoreland Woodlot, Shoreland Best Management Practices		✓		✓	<b>Description:</b> BMPs for shoreland woodlots; fact-sheet in a series of 18 <b>Intended audience:</b> Private landowners, foresters	Available at <a href="http://www.mes.umn.edu/Documents/D/D/Other/DD6946j.html">http://www.mes.umn.edu/Documents/D/D/Other/DD6946j.html</a>
Evaluating the Effectiveness of Forestry Best Management Practices in Meeting Water Quality or Standards (1994)		✓			<b>Description:</b> A reference guide for evaluating the effectiveness of nonpoint source pollution controls during forestry operations. Presents a selection of techniques to assist managers in choosing an appropriate level of monitoring to address identified issues. <b>Intended audience:</b> Foresters	EPA841-B-94-005A (3-hole punch) EPA841-B-94-005B (bound)
Practical Guide to Forest Water Quality (1997)		✓			<b>Description:</b> Twenty-one minute video on impact of sediment on water quality, and an overview of forestry BMPs. <b>Intended audience:</b> Landowners	Michigan Department of Natural Resources Surface Water Quality Division P.O. Box 30273 Lansing, MI 48909 Web URL: <a href="http://www.deq.state.mi.us">http://www.deq.state.mi.us</a> Document is free

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Water Quality and the Working Forest (1997)		✓			<b>Description:</b> 15-minute video on water quality and the impacts of sediment on water quality. Discusses forestry BMPs. <b>Intended audience:</b> Forestry	Surface Water Quality Division Michigan Department of Environmental Quality P.O. Box 30273 Lansing, MI 48909 Web URL: <a href="http://www.deq.state.mi.us">http://www.deq.state.mi.us</a> Document is free
South Carolina's Best Management Practices on Forestry		✓	✓		<b>Description:</b> Describes state-approved BMPs for tree harvesting, planting, etc. <b>Intended audiences:</b> Rural, suburban, and urban residents; local government; forestry professionals	Tim Adams South Carolina Forestry Commission P.O. Box 21707 Columbus, SC 29221 (803) 896-8802 Document is free
Field Guide: BMPs for Controlling Soil Erosion on Timber Harvesting Operations in New Hampshire (1991)		✓	✓		<b>Description:</b> Provides foresters, landowners, and loggers with practical methods for planning, carrying out, and closing timber harvesting operations with a minimum of disturbance to soil and water quality. <b>Intended audiences:</b> Rural, suburban, and urban residents; foresters and loggers; landowners	Charles Niebling NH Timberland Owners Association 54 Portsmouth Street Concord, NH 03301 Document is free
Erosion and Sediment Control Handbook for Maine Timber Harvesting Operations, Best Management Practices (1994)		✓			<b>Description:</b> 47-page booklet provides guidelines for planning and construction activities associated with harvesting Maine's forest resources. <b>Intended audiences:</b> Foresters and logging contractors; municipal and state officials who deal with timber harvesting operations	Arlene Davis Maine Department of Environmental Protection 17 State House Station Augusta, ME 04333-0017 Document is free

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Best Management Practices Field Handbook (1995)		✓			<b>Description:</b> 36-page pocket-sized field version of Erosion of Sediment Control Handbook for Maine Timber Harvesting Operations, Best Management Practices <b>Intended audiences:</b> Foresters and logging contractors; municipal and state officials who deal with timber harvesting operations	Arlene Davis Maine Department of Environmental Protection 17 State House Station Augusta, ME 04333-0017 Document is free
NRCS Field Office Technical Guide	✓		✓		<b>Description:</b> Standards and specifications for conservation practices, soils information for the county, planning considerations, conservation practice effects, and others.	
Indiana Drainage Handbook	✓		✓		<b>Description:</b> BMPs for all aspects of agricultural and non agricultural drainage activities. Adapted by Conservation Partnership Agencies.	
Indiana Erosion Control Handbook for Developing Areas			✓		<b>Description:</b> Document was developed by Indiana Department of Natural Resources, NRCS, and partner agencies and contains BMPs for construction sites.	IDNR Division of Soils Document is \$25
Developing Successful Runoff Control Programs for Urbanized Areas (1994)			✓	✓	<b>Description:</b> Describes institutional strategies for developing, revising, and implementing runoff control programs in urbanized communities. Also, useful to coastal states in establishing nonpoint source control programs under Section 6217 of the Coastal Zone Act Reauthorization Amendments. <b>Intended audience:</b> Urban residents and governments	EPA841-K-94-003
Best Management Practices for Erosion and Sediment Control (1992)			✓		<b>Description:</b> 150-page handbook describes various BMPs for erosion and sediment control. For use in project design, planning, construction, and maintenance. <b>Intended audiences:</b> construction, planners; and landscape architects	Barbara Otis ME DOT Office of Environmental Services State House Station #16 Augusta, ME 04333 (207) 287-5735 Document is \$7.00

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BMPs to Control NPS: A Guide for Citizens and Town Officials (1994)	✓		✓		<b>Description:</b> Guide describes the causes of nonpoint source pollution and suggests ways to prevent it through improved land use planning and BMPs. <b>Intended audiences:</b> rural, suburban, and urban residents; local government; municipal officials; and watershed groups	Eric Williams New Hampshire Department of Environmental Services 6 Hazen Drive Concord, NH 03301 (603) 271-35-03 Document is free
Urban Targeting and BMP Selection: An Information and Guidance Manual for State Nonpoint Source Program Staff Engineers and Managers (1990)			✓		<b>Description:</b> Assists state and local agency personnel in targeting and prioritizing areas within their jurisdiction that require abatement of urban runoff water quality problems. Consolidates existing information, and describes a non-computerized technology for targeting control areas <b>Intended audiences:</b> State and local government	Terrene Institute 1000 Connecticut Avenue, NW, Suite 802 Washington, DC 20036 (202) 833-8317 EPA941-B-90-111
Groundwater Protection Practices (1991)			✓		<b>Description:</b> Series of pamphlets outlining groundwater BMPs for particular pollution sources including: septic systems, urban and suburban landscaping, motor vehicle services, roadway deicing, and small underground storage tanks. <b>Intended audiences:</b> rural, suburban, and urban residents; local government; municipal officials; and watershed groups	NJ DEP Office of Land & Water Planning CN423 401 East State Street Trenton, NJ 08825 (609) 633-1179 Document is free
Guidebook of Best Management Practices for Michigan Watersheds			✓		<b>Description:</b> Technical manual on structural, vegetative, and managerial BMPs to control runoff from construction sites, urban areas and large recreational areas such as golf courses. <b>Intended audiences:</b> Local government, developers, construction contractors, and cities	Publications Michigan Dept. Of Natural Resources SWQD P.O. Box 30273 Lansing, Michigan 48909 (517) 373-2867 Document is free

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Homeowner s Guide to Managing Your Lawn to Protect Water Quality (1991)			✓		<b>Description:</b> Fact sheet describing BMPs for lawn maintenance in urban areas. <b>Intended audiences:</b> homeowners	URI Cooperative Extension Education Center, University of Rhode Island Kingston, Rhode Island 02881 (800) 448-1011 Document is free
Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem Protection and Enhancement (1995)			✓		<b>Description:</b> Comprehensive manual describes BMPs for controlling urban nonpoint source water pollution. Also includes erosion and sediment control, water management, fish and wildlife habitat improvement and visual and environmental quality. <b>Intended audiences:</b> Local government, planners, and agencies	Publications, Conservation Technology Information Center 1220 Potter Drive, Suite 170 West Lafayette, Indiana 47906 (317) 494-9555 Document is \$75 for hard copy and \$55 for disk copy
Kentucky Best Management Practices for Construction Activities (1994)			✓		<b>Description:</b> Manual provides information on water management and construction erosion in urban areas, subdivisions, road construction, abandoned mine sites, industrial, institutional, and recreational areas. <b>Intended audiences:</b> Local government, construction	Steve Coleman, KY Div. of Conservation 691 Teton Trail Frankfort, Kentucky 40601 (502) 564-3080 Document is free
Protecting Water Quality in Urban Areas: BMPs for Minnesota (1990)			✓		<b>Description:</b> Detailed descriptions of urban BMPs including erosion and sediment control practices. <b>Intended audience:</b> City planners and engineers and consultants	Andrea Schuberg Minnesota Pollution Control Agency WQ Division, NPS 520 Lafayette Road St. Paul, Minnesota 55155 (612) 297-7575 Document is \$35
BMP Design Supplements for Cold Climates (1997)	✓		✓		<b>Description:</b> Document provides modifications to traditional BMP designs to improve effectiveness in cold climates. <b>Intended audience:</b> Urban planners and city engineers	Center for Watershed Protection Document is \$15

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	A	L	U <sup>a</sup>	C		
Fact Sheets: Erosion and Sediment Control Techniques for Construction Sites (1997)			✓		<b>Description:</b> Set of 13 fact sheets that provide a current and comparative assessment of the cost, effectiveness, maintenance, and proper application of 14 commonly-used erosion and sediment control techniques. The fact sheets were compiled based on surveys of erosion and sediment control experts and a literature search. <b>Intended audience:</b> construction	Center for Watershed Protection Documents are \$10 for set of 13 fact sheets
Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance (1993)				✓	<b>Description:</b> Describes BMPs that can be used to comply with Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), which requires states and territories with federally approved coastal zone management programs to develop and implement Coastal Nonpoint Pollution Control Programs. Published jointly by EPA and NOAA. <b>Intended audiences:</b> State and local governments	RI Department of Environmental Management 83 Park Street Providence, RI 02903 (401) 277-3434 (401) 277-2591 - fax Document is free
Marina Best Management Practice Manual (1994)				✓	<b>Description:</b> Details BMPs to control nonpoint source pollutants from recreational boating activities. <b>Intended audiences:</b> None indicated	CT Department of Environmental Protection Map and Publication Sales 79 Elm Street Hartford, CT 06106 (203) 566-7719 Document is free
Best Management Practices for Coastal Marinas (1992)			✓	✓	<b>Description:</b> Examines the impacts of marina construction, expansion, and operations on the coast water of CT. Suggests BMPs to minimize adverse environmental effects of marina-related activities. <b>Intended audiences:</b> Rural, suburban, and urban residents; local government; outdoor recreationalists; and marina owners/operators	

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